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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,246	09/17/2003	James Bumgardner	UV-438 CIP	3327
1473 7590 06/22/2010 ROPES & GRAY LLP PATENT DOCKETING 39/361 1211 AVENUE OF THE AMERICAS NEW YORK, NY 10036-8704			EXAMINER DANG, HUNG Q	
			ART UNIT 2621	PAPER NUMBER
			MAIL DATE 06/22/2010	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/605,246	BUMGARDNER ET AL.	
	Examiner	Art Unit	
	Hung Q. Dang	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/30/2010 has been entered.

Response to Arguments

Applicant's arguments filed 03/30/2009 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

... a signal does not fall within one of the four statutory classes of Sec. 101.

.... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

Claims 55-66 and 69 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows.

Claims 55-66 and 69 recites "computer-readable storage media". However, in the state of the art, transitory signals are commonplace as a medium for transmitting computer instruction and thus, in the absence of any evidence to the contrary and give the broadest reasonable interpretation, the scope of a "computer readable storage medium" covers a signal transmitted via a magnetic, optical, electromagnetic, infrared, ... or propagation medium per se."

A magnetic, optical, electromagnetic, infrared, ... or propagation medium is neither a process nor a product, (i.e., a tangible "thing") and therefore does not fall within one of the four statutory classes of § 101. Rather, a "magnetic, optical, electromagnetic, infrared, ... or propagation medium" is a form of energy, in the absence of any physical structure or tangible material.

The Examiner suggests amending the claim to recite the "computer-readable storage media" as "computer-readable non-transitory storage media" to include tangible computer readable media, while at the same time excluding the intangible media such as signals, carrier waves, etc. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 34, 36-49, 55, and 57-61 are rejected under 35 U.S.C. 102(e) as being anticipated by Francis et al. (US Patent 7,689,995 – hereinafter Francis).

Regarding claim 34, Francis discloses a video recorder configured to solve a tuner conflict (*column 5, lines 23-26; column 8, lines 33-48; column 9, lines 27-29*), the video recorder comprising: at least one television tuner configured to receive a plurality of shows (*column 5, lines 23-26; column 8, lines 33-48; column 9, lines 27-29*); a storage device coupled to the at least one television tuner, the storage device being configured to store a plurality of the received shows (*column 1, lines 13-18; column 2, line 66 – column 3, line 17*); and a conflict manager configured to: maintain a list of shows that are scheduled for storage on the storage device using the at least one tuner (*column 8, line 49 – column 9, line 29*); determine that there is a tuner conflict based on the maintained list of shows when at least two of the shows are scheduled for storage on the storage device using the at least one tuner at the same time (*column 8, line 49 – column 9, line 29*), generate a plurality of solutions to the tuner conflict without further action by a user, each solution comprising a subset of the shows in the maintained list

(column 8, line 49 – column 9, line 29), by: determining which of the shows in the maintained list conflict with a given one of the shows (column 8, line 49 – column 9, line 29); generating a plurality of candidate solutions, each candidate solution comprising a subset of the conflicting shows (column 8, line 49 – column 9, line 29); and determining, for each of the plurality of candidate solutions, whether removal of the subset of the conflicting shows from the maintained list solves the tuner conflict (column 8, line 49 – column 9, line 29; column 10, lines 13-20 – wherein the removal of conflicting shows is performed by setting a 'null solution' for one or more recording jobs for conflicting shows as shown in the tables); and initiate the storage of shows according to one of the plurality of candidate solutions determined to solve the tuner conflict (column 10, lines 27-31 – wherein a particular plan corresponds to a candidate solution that is determined to solve the tuner conflict).

Regarding claim 36, Francis also discloses the conflict manager is further configured to receive a request to store a further show to the storage device and assign a priority to the further show *(column 3, lines 30-62; column 8, lines 33-64).*

Regarding claim 37, Francis also discloses the conflict manager is further configured to evaluate the plurality of solutions by comparing the assigned priority of the further show to priorities associated with the shows in the plurality of solutions *(column 3, lines 30-62; column 8, lines 33-64; column 9, lines 47-63).*

Regarding claim 38, Francis also discloses the conflict manager is further configured to select at least one solution if each of the shows in the at least one solution

has a lower priority than the priority assigned to the further show (*column 3, lines 50-55*).

Regarding claim 39, Francis also discloses the conflict manager is further configured to cancel the recording of each of the shows in the at least one selected solution (*column 7, line 64 – column 6, line 10 – wherein the user can specify removal of recording of any event*).

Regarding claim 40, Francis also discloses the conflict manager is further configured to provide the user with the opportunity to cancel at least one show from one of the plurality of solutions (*column 7, line 64 – column 6, line 10 – wherein the user can specify removal of recording of any event*).

Regarding claim 41, Francis also discloses the video recorder is further configured to search through an interactive program guide to determine if one of the shows in the maintained list is available to record at a later time (*column 7, line 64 – column 6, line 10; column 8, line 65 – column 6; Fig. 5; Fig. 7*).

Regarding claim 42, Francis also discloses rescheduling the recording of the program to the later time based on the determination (*Fig. 5; Fig. 7; column 9, lines 16-25; column 10, lines 12-20*).

Claim 43 is rejected for the same reason as discussed in claim 34 above.

Claim 45 is rejected for the same reason as discussed in claim 36 above.

Claim 46 is rejected for the same reason as discussed in claim 37 above.

Claim 47 is rejected for the same reason as discussed in claim 38 above.

Claim 48 is rejected for the same reason as discussed in claim 39 above.

Claim 49 is rejected for the same reason as discussed in claim 40 above.

Claim 55 is rejected for the same reason as discussed in claim 34 above.

Claim 57 is rejected for the same reason as discussed in claim 36 above.

Claim 58 is rejected for the same reason as discussed in claim 37 above.

Claim 59 is rejected for the same reason as discussed in claim 38 above.

Claim 60 is rejected for the same reason as discussed in claim 39 above.

Claim 61 is rejected for the same reason as discussed in claim 40 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 35, 44, 56, and 67-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Francis as applied to claims 34, 36-43, 45-49, 55, and 57-61 above, and further in view of Ohno.

Regarding claim 35, see the teachings of Francis as discussed in claim 34 above. However, Francis does not explicitly disclose the conflict manager is further configured to determine an availability of at least one other tuner in the network of tuners by querying the network for another available tuner.

Ohno discloses the conflict manager is further configured to determine an availability of at least one other tuner in a network of tuners by querying the network for another available tuner ([0074]-[0078]).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Ohno into the video recorder disclosed by Francis in order to allow users to watch or record more than one programs with different modulation frequencies while recording the other program via the use of other digital receivers (*Ohno*, [0007]).

Claim 44 is rejected for the same reason as discussed in claim 35 above.

Claim 56 is rejected for the same reason as discussed in claim 35 above.

Regarding claim 67, Ohno also discloses the conflict manager is further configured to initiate the storage of shows using the at least one other tuner in the network of tuners according to the storage schedule ([0078]; [0079]).

Claim 68 is rejected for the same reason as discussed in claim 67 above.

Claim 69 is rejected for the same reason as discussed in claim 67 above.

Claims 50-54 and 62-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Francis as applied to claims 34, 36-43, 45-49, 55, and 57-61 above, and further in view of Ismail.

Regarding claim 50, see the teachings of Francis as discussed in claim 45 above. However, Francis does not explicitly disclose the priority associated with one show in the maintained list of shows is established by comparing the length of the one show to each of the other shows in the maintained list.

Ismail discloses the priority associated with one show in the maintained list of shows is established by comparing the length of the one show to each of the other shows in the maintained list ([0054]).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Ismail into the method disclosed by Francis to meet storage capacity constraint.

Regarding claim 51, Ismail also discloses the priority associated with one show in the maintained list of shows is established based on whether the show was scheduled for recording manually or automatically ([0055]).

Regarding claim 52, Ismail also discloses determining if there is a conflict between a plurality of series ([0019]; [0054]).

Regarding claim 53, Ismail also discloses selecting at least one solution if at least one show in the at least one solution is part of the series and is a repeat.

Regarding claim 54, Ismail et al. also disclose the priority associated with one show in the maintained list of shows is established based on whether the one show is currently being recorded to the storage device ([0054]; [0055] – *wherein the show currently being recorded has the highest priority*).

Claim 62 is rejected for the same reason as discussed in claim 50 above.

Claim 63 is rejected for the same reason as discussed in claim 51 above.

Claim 64 is rejected for the same reason as discussed in claim 52 above.

Claim 65 is rejected for the same reason as discussed in claim 53 above.

Claim 66 is rejected for the same reason as discussed in claim 54 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571)270-1116. The examiner can normally be reached on IFT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung Q Dang/
Examiner, Art Unit 2621

/Thai Tran/
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